

AMENDMENTS

In the Claims

The following is a marked-up version of the claims with the language that is underlined ("____") being added and the language that contains strikethrough ("~~—~~") being deleted:

1. (Currently Amended) A method ~~comprising the steps of:~~ comprising:
 - (A) receiving an email message from a simple mail transfer protocol (SMTP) server, the email message comprising:
 - (A1) a 32-bit string indicative of the length of the email message;
 - (A2) a text body;
 - (A3) an SMTP email address;
 - (A4) a domain name corresponding to the SMTP email address;
 - (A5) an attachment;
 - (B) tokenizing the text body to generate tokens representative of words in the text;
 - (C) tokenizing the SMTP email address to generate a token representative of the SMTP email address;
 - (D) tokenizing the domain name to generate a token that is representative domain name;
 - (E) tokenizing the attachment to generate a token that is representative of the attachment, ~~the tokenizing step comprising the steps of:~~ wherein tokenizing comprises:
 - (E1) generating a 128-bit MD5 hash of the attachment;
 - (E2) appending the 32-bit string to the generated MD5 hash to produce a 160-bit number; and
 - (E3) UUencoding the 160-bit number to generate the token representative of the attachment;
 - (F) determining a probability value for each of the generated tokens;
 - (G) selecting a predefined number of interesting tokens, the interesting tokens being the

- generated tokens having the greatest non-neutral probability values;
- (H) performing a Bayesian analysis on the selected interesting tokens to generate a spam probability; and
 - (I) categorizing the email message as a function of the generated spam probability.

2 – 5. (Canceled)

6. (Currently Amended) A method ~~comprising the steps of:~~ comprising:
receiving an email message comprising a text body, an SMTP email address, an attachment, and a domain name corresponding to the SMTP email address;
tokenizing the SMTP email address to generate a token representative of the SMTP email address;
tokenizing the attachment to generate a token that is representative of the attachment;
tokenizing the domain name to generate a token representative of the domain name;
and
determining a spam probability from the generated tokens.

7 – 10. (Canceled)

11. (Currently Amended) The method of claim 6, wherein ~~the step of determining the spam probability comprises the steps of:~~ comprises:
assigning a spam probability value to the token representative of the SMTP email address;
assigning a spam probability value to the token representative of the domain name; and
generating a Bayesian probability value using the spam probability values assigned to the tokens.

12. (Currently Amended) The method of claim 11, wherein ~~the step of~~ determining the spam probability further ~~comprises the steps of:~~ comprises:

comparing the generated Bayesian probability value with a predefined threshold value.

13. (Currently Amended) The method of claim 12, wherein ~~the step of~~ determining the spam probability further ~~comprises the steps of:~~ comprises:

categorizing the email message as spam in response to the Bayesian probability value being greater than the predefined threshold.

14. (Currently Amended) The method of claim 12, wherein ~~the step of~~ determining the spam probability further ~~comprises the step of:~~ comprises:

categorizing the email message as non-spam in response to the Bayesian probability value being not greater than the predefined threshold.

15. (Canceled)

16. (Currently Amended) The method of ~~claim 15,~~ claim 6, wherein ~~the step of~~ receiving the email message further ~~comprises the step of:~~ comprises:

receiving an email message including a text body.

17. (Currently Amended) The method of claim 16, further ~~comprising the step of:~~ comprising:

tokenizing the words in the text body to generate tokens representative of the words in the text body.

18. (Canceled)

19. (Currently Amended) The method of claim 17, wherein ~~the step of~~ determining the spam probability ~~comprises the steps of:~~ comprises:

assigning a spam probability value to each of the tokens representative of the words in the text body;

assigning a spam probability value to the token representative of the attachment; and

generating a Bayesian probability value using the spam probability values assigned to the tokens.

20. (Currently Amended) The method of claim 19, wherein ~~the step of~~ determining the spam probability further ~~comprises the steps of:~~ comprises:

comparing the generated Bayesian probability value with a predefined threshold value.

21. (Currently Amended) The method of claim 20, wherein ~~the step of~~ determining the spam probability further ~~comprises the steps of:~~ comprises:

categorizing the email message as spam in response to the Bayesian probability value being greater than the predefined threshold.

22. (Currently Amended) The method of claim 20, wherein ~~the step of~~ determining the spam probability further ~~comprises the steps of:~~ comprises:

categorizing the email message as non-spam in response to the Bayesian probability value being not greater than the predefined threshold.

23. (Currently Amended) A system comprising:

email receive logic configured to receive an email message comprising an SMTP email

~~address and~~ address, a domain name corresponding to the SMTP email ~~address~~; address, and an attachment;

tokenize logic configured to tokenize the SMTP email address to generate a token representative of the SMTP email address;

tokenize logic configured to tokenize the attachment to generate a token that is representative of the attachment;

tokenize logic configured to tokenize the domain name to generate a token representative of the domain name; and

analysis logic configured to determine a spam probability from the generated tokens.

24. (Currently Amended) A system comprising:

means for receiving an email message comprising an SMTP email ~~address and~~ address, a domain name corresponding to the SMTP email ~~address~~; address, and an attachment;

means for tokenizing the SMTP email address to generate a token representative of the SMTP email address;

means for tokenizing the attachment to generate a token that is representative of the attachment;

means for tokenizing the domain name to generate a token representative of the domain name; and

means for determining a spam probability from the generated tokens.

25. (Currently Amended) A computer-readable medium comprising:

computer-readable code adapted to instruct a programmable device to receive an email message comprising an SMTP email ~~address and~~ address, a domain name corresponding to the SMTP email ~~address~~; address, and an attachment;

computer-readable code adapted to instruct a programmable device to tokenize the

SMTP email address to generate a token representative of the SMTP email address;

computer-readable code adapted to instruct a programmable device to tokenize the attachment to generate a token that is representative of the attachment;

computer-readable code adapted to instruct a programmable device to tokenize the domain name to generate a token representative of the domain name; and

computer-readable code adapted to instruct a programmable device to determine a spam probability from the generated tokens.

26. (Original) The computer-readable medium of claim 25, further comprising:

computer-readable code adapted to instruct a programmable device to assign a spam probability value to the token representative of the SMTP email address;

computer-readable code adapted to instruct a programmable device to assign a spam probability value to the token representative of the domain name; and

computer-readable code adapted to instruct a programmable device to generate a Bayesian probability value using the spam probability values assigned to the tokens.

27. (Original) The computer-readable medium of claim 26, further comprising:

computer-readable code adapted to instruct a programmable device to compare the generated Bayesian probability value with a predefined threshold value.

28. (Original) The computer-readable medium of claim 27, further comprising:

computer-readable code adapted to instruct a programmable device to categorize the email message as spam in response to the Bayesian probability value being greater than the predefined threshold.

29. (Original) The computer-readable medium of claim 27, further comprising:

computer-readable code adapted to instruct a programmable device to categorize the email message as non-spam in response to the Bayesian probability value being not greater than the predefined threshold.

30. (Currently Amended) A system comprising:
email receive logic configured to receive an email message comprising an attachment;
tokenize logic configured to tokenize the entire attachment to generate a token representative of the attachment; and
analysis logic configured to determine a spam probability from the generated token.

31. (Original) A system comprising:
means for receiving an email message comprising an attachment;
means for tokenizing the attachment to generate a token representative of the attachment; and
means for determining a spam probability from the generated token.

32. (Currently Amended) A computer-readable medium comprising:
computer-readable code adapted to instruct a programmable device to receive an email message comprising an attachment;
computer-readable code adapted to instruct a programmable device to tokenize the entire attachment to generate a token representative of the attachment; and
computer-readable code adapted to instruct a programmable device to determine a spam probability from the generated token.

33. (Original) The computer-readable medium of claim 32, further comprising:
computer-readable code adapted to instruct a programmable device to receive an email

message having a text body.

34. (Original) The computer-readable medium of claim 33, further comprising:
computer-readable code adapted to instruct a programmable device to tokenize the words in the text body to generate tokens representative of the words in the text body.

35. (Original) The computer-readable medium of claim 34, further comprising:
computer-readable code adapted to instruct a programmable device to assign a spam probability value to each of the tokens representative of the words in the text body;
computer-readable code adapted to instruct a programmable device to assign a spam probability value to the token representative of the attachment; and
computer-readable code adapted to instruct a programmable device to generate a Bayesian probability value using the spam probability values assigned to the tokens.

36. (Original) The computer-readable medium of claim 35, further comprising:
computer-readable code adapted to instruct a programmable device to compare the generated Bayesian probability value with a predefined threshold value.

37. (Original) The computer-readable medium of claim 36, further comprising:
computer-readable code adapted to instruct a programmable device to categorize the email message as spam in response to the Bayesian probability value being greater than the predefined threshold.

38. (Original) The computer-readable medium of claim 36, further comprising:
computer-readable code adapted to instruct a programmable device to categorize the email message as non-spam in response to the Bayesian probability value being not greater than the predefined threshold.